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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,472	01/15/2004	Adrian P. Stephens	42P18153	7600
59796	7590	11/30/2009		
INTEL CORPORATION c/o CPA Global P.O. BOX 52050 MINNEAPOLIS, MN 55402			EXAMINER HUYNH, NAM TRUNG	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 11/30/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/759,472	<b>Applicant(s)</b> STEPHENS ET AL.	
	<b>Examiner</b> NAM HUYNH	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 7-10, 13-15, 17, 21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15, 17, 21 and 23 is/are allowed.
- 6) ☒ Claim(s) 7-10, 13 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/16/09</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

This office action is in response to amendment filed on 7/13/09. Of the previously presented claims 7-10, 13-15, 17, 21, and 23; no amendments were made.

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 7/16/09 has been considered by the examiner.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 7-10, 13, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Perahia (US 7,352,718).

Regarding claim 7, Perahia teaches an apparatus, comprising a first electronic device (SDMA access point) adapted to:

receive a data transmission (response to ranging transmission) from each of multiple second electronic devices (subscriber units), each of the data transmissions including a predicted duration of a length of a subsequent transmission (reception time

of the response to the ranging transmission sent by the subscriber unit) from the respective second electronic device (column 6, lines 48-64);

organize at least some of multiple second electronic devices into a group having similar predicted durations for the subsequent data transmissions (column 6, lines 48-64; access point are grouped according to distance from the access point which is derived from the response time to the ranging transmission); and

transmit polls substantially simultaneously to the second electronic devices within the group (column 7, lines 15-17; access point polls subscriber units in the group).

Regarding claim 8, Perahia teaches the first electronic device is further adapted to receive the data transmissions (upstream transmission of multiple packets) from the second electronic devices within the group substantially simultaneously (column 7, lines 13-15).

Regarding claim 9, Perahia teaches the first electronic device is further adapted to transmit acknowledgements to the wireless devices within the group substantially simultaneously (column 7, lines 38-41; acknowledgements are transmitted to the subscriber devices simultaneously).

Regarding claim 10, Perahia teaches the first electronic device is further adapted to transmit polls to other second electronic devices within another group substantially simultaneously (column 6, lines 48-64; it is inherent that the access point can poll another group if needed because the invention of Perahia is not limited to the number of groups that can be polled).

Regarding claim 13, Perahia teaches the apparatus comprises:

a computing platform (access point); and  
at least four antennas coupled to the computing platform (column 1, lines 49-51;  
access point implements MIMO techniques).

Regarding claim 14, Perahia teaches the apparatus further comprises at least  
four modulator/demodulators (RF/IF chains) coupled between the computing platform  
and the at least four antennas (column 5, lines 10-23).

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 7-10, 13, and 14 have been  
considered but are moot in view of the new ground(s) of rejection.

### ***Allowable Subject Matter***

5. Claims 15, 17, 21, and 23 are allowed.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the  
examiner should be directed to NAM HUYNH whose telephone number is (571)272-  
5970. The examiner can normally be reached on 8 a.m.-5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
supervisor, George Eng can be reached on 571-272-7495. The fax phone number for  
the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/  
Supervisory Patent Examiner, Art Unit 2617

/Nam Huynh/  
Examiner, Art Unit 2617